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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BURLESON, MICHAEL L

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/729,351

Applicant(s)

TERANISHI ET AL.

Examiner

Michael Burleson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed January 26, 2005 have been fully considered but they are not persuasive.
2. Regarding claims 1-3, Applicant states that the reference of Miyake US 6188490 "is not directed to the processing of print information in which an individual print job can comprise image data based on multiple document images of various sizes and/or orientations." Amended claim 1 of Applicant's invention states, "... receives print jobs in which an individual print job can comprise of image data based on multiple document images of various sizes and/or orientations..." Although Applicant points to figure 5 of Miyake stating that each document image is of uniform size, claim 1 of the amended application states that the individual print jobs can be based on multiple document images of various sizes and/or orientations and is therefore not limited to document images of a uniform size. Rejection of claims 1-3 is maintained.
3. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

4. Regarding claims 1-11, Examiner feels that the reference of Moro US 5357348 teaches the limitations of the present invention; in particular, processing image data, based on multiple document images of various sizes and/or orientation. Claims 1-11 are rejected.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted was 07/07/2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5 and 11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The program product claimed is merely a set of instructions per se that is on a product, which could range from a piece of paper or instructions imprinted on the side of a wall. Since the program product is merely a set of

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instructions not embodied on a computer readable medium to realize the computer program functionality, the claimed subject matter is non-statutory. See MPEP § 2106 IV.B.1.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyake US 6188490.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Miyake teaches of a printer driver (figure 4), which reads on a receiving unit that receives print jobs in which an individual print job can comprise image data, based on multiple document images of various sizes and/or orientations. Miyake teaches of a personal computer (1) that serves as a print processing device (column 3, lines 1-3 and figure 1), which reads on a processing unit for processing the received image data so that the multiple document images can be printed on a sheet of paper. He teaches of a layout-calculating unit (E3) that calculates a layout quantity based on the original image (column 4, lines 14-20 and figure 4), which reads on an identifying unit for identifying an area, which is not yet covered with document images. He also teaches of a layout quantity assessment unit (F3), which assess whether or not the layout quantity matches a received value (column 4, lines 21-30 and figure 4), which reads on a judging unit for judging whether new document images or images can be laid out in said area.

Regarding claim 2, Miyake teaches of a layout quantity assessment unit (F3), which assess whether or not the layout quantity matches a received value and then sends the data to a sheet quantity change unit (F5) to print images on another sheet (column 4, lines 21-30 and lines 40-48 and figure 4). This reads on the judging unit judges that no new document image or images can be laid out in said area, a new document image or new document images are designated to be laid out on another sheet of paper.

Regarding claim 3, Miyake shows document images adjacent to each other (figure 5), which reads on processing unit lays out document images adjacent to each other.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Moro US 5357348.

8. Regarding claim 1, Moro teaches that the main control section (61) receives document images of different sizes (column 9, lines 35-40), this reads on a receiving unit that receives print jobs in which an individual print job can comprise image data based on multiple document images of various sizes and/or orientations. Moro teaches that the main control section (61) enables documents to be combined and copied on a copying sheet (103) (column 9, lines 40-48), which reads on a processing unit for processing the received image data so that the multiple document images can be printed on a sheet of paper. Moro teaches that the main control section (61) judges that another document could not fit in the copying sheet (103) (column 9, lines 48-54), which reads on wherein said processing step comprises an identifying step for identifying an

area which is not yet covered with document images, and a judging step for judging whether a new document image or images can be laid out in said area.

9. Regarding claim 2, Moro teaches that the main control section (61) judges that another document could not fit in the copying sheet (103) and places it on copying sheet (104) (column 9, lines 48-54), which reads on judging unit judges that no new document image or images can be laid out in said area, a new document image or new document images are designated to be laid out on another sheet of paper.

10. Regarding claim 3, Moro teaches that the main control section (61) enables documents to be combined and copied on a copying sheet (103) (column 9, lines 40-48 and figure 11), which reads on a processing unit for processing the received image data so that the multiple document images can be printed on a sheet of paper.

11. Regarding claim 4, Moro teaches that the main control section (61) receives document images of different sizes (column 9, lines 35-40), this reads on receiving an individual print job containing image data based on multiple document images of various sizes and/or orientations. Moro teaches that of enabling documents to be combined and copied on a copying sheet (103) (column 9, lines 40-48), which reads on processing the received image data so that the multiple document images can be printed on a sheet of paper. Moro teaches that the main control section (61) judges that another document could not fit in the copying sheet (103) (column 9, lines 48-54), which reads on wherein said processing step comprises an identifying step for identifying an area which is not yet covered with document images, and a judging step for judging whether a new document image or images can be laid out in said area.

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12. Regarding claim 5, As best understood, Moro teaches that the main control section (61) receives document images of different sizes (column 9, lines 35-40), this reads on receiving an individual print job containing image data based on multiple document images of various sizes and/or orientations. Moro teaches that of enabling documents to be combined and copied on a copying sheet (103) (column 9, lines 40-48), which reads on processing the received image data so that the multiple document images can be printed on a sheet of paper. Moro teaches that the main control section (61) judges that another document could not fit in the copying sheet (103) (column 9, lines 48-54), which reads on wherein said processing step comprises an identifying step for identifying an area which is not yet covered with document images, and a judging step for judging whether a new document image or images can be laid out in said area.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over More US 5357348 in view of Miyake US 6188490.

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15. Regarding claim 6, Moro teaches of a image processing section (66) that receives image signals supplied from document scanning section processing section (69) (column 7, lines 65-67 and column 8, lines 57-61), which reads on a receiving unit for receiving an individual print job comprising image data based on multiple document images of various sizes. Moro teaches of a main control section (61) that judges that another document could not fit in the copying sheet (103) (column 9, lines 48-54), which reads on a detecting unit for detecting a maximum size of document images based on the received image data.

16. Moro fails to teach of a selecting unit for selecting paper with a size equal to or larger than the detected maximum size and a forming unit for forming images based on the image data on the selected paper.

17. Miyake teaches of a layout quantity assessment unit (F3), in which the image size and sheet size of a layout pattern is carried out (column 3, lines 25-29 and column 4, lines 21-30), which reads on a selecting unit for selecting paper with a size equal to or larger than the detected maximum size. He also teaches on a printer (20) that analyzes print data and prints the image (column 2, lines 66-67), which reads on a forming unit for forming images based on the image data on the selected paper.

1. The main control section (61) and the image processing section (66) of Moro could have been modified with the layout quantity assessment unit (F3) and the printer (20) of Miyake. This modification would have been obvious to one of ordinary skill in the art at the time of the invention to assure that the size of the image is the same as the

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output paper so that the entire image will fit into the area of the output paper to be printed.

18. Regarding claim 7, Moro teaches that the main control section (61) receives document images of different sizes (column 9, lines 35-40), this reads on receiving an individual print job containing image data based on multiple document images of various sizes and/or orientations. Moro teaches of a main control section (61) that judges that another document could not fit in the copying sheet (103) (column 9, lines 48-54), which reads on a detecting unit for detecting a maximum size of document images based on the received image data.

19. Moro fails to teach of a calculating unit for calculating a scaling factor that causes the detected maximum size to match with the size of a print area, a processing unit for scaling up or down the sizes of the document images based on the calculated scaling factor and a forming unit for forming images based on the processed image data on the print area.

20. Miyake teaches that the print driver (PD) applies a pattern in which, enlargement or reduction corresponds to the relationship between image size and sheet size such that printing takes place on the entire sheet (column 3, lines 21-28), which reads on a calculating unit for calculating a scaling factor that causes the detected maximum size to match with the size of a print area. Miyake teaches of a print data generator (E5) that changes original image magnifications to correspond to sheet size (column 4, lines 36-39 and figure 4), which reads on a processing unit for scaling up or down the sizes of the document images based on the calculated scaling factor. He also teaches on a

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printer (20) that analyzes print data and prints the image (column 2, lines 66-67), which reads on a forming unit for forming images based on the image data on the selected paper.

2. The main control section (61) of Moro could have been modified with the print driver, print data generator (E5) and the printer (20) of Miyake. This modification would have been obvious to one of ordinary skill in the art at the time of the invention to assure that the size of the image is the same as the output paper so that the entire image will fit into the area of the output paper to be printed.

21. Regarding claim 8, Moro teaches of copying sheets (105-109) (figure 13 and column 10, lines 56-67), which reads on the print area is the entire area of a sheet of paper.

22. Regarding claim 9, Moro teaches that the copying sheets (105-109) are divided up into equal parts (figure 13 and column 10, lines 56-67), which reads on the print area is an area obtained by dividing the entire area of a sheet of paper into equal parts.

23. Regarding claim 10, Moro teaches that the main control section (61) receives document images of different sizes (column 9, lines 35-40), this reads on receiving an individual print job containing image data based on multiple document images of various sizes and/or orientations.

24. Moro fails to teach of detecting a maximum size of document images based on the received image data, calculating a scaling factor that causes the detected maximum size to match with the size of a print area and scaling up or down the sizes of the document images based on the calculated scaling factor.

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25. Miyake teaches that the print driver (PD) applies a pattern in which, enlargement or reduction corresponds to the relationship between image size and sheet size such that printing takes place on the entire sheet (column 3, lines 21-28), which reads on a calculating unit for calculating a scaling factor that causes the detected maximum size to match with the size of a print area. Miyake teaches of a print data generator (E5) that changes original image magnifications to correspond to sheet size (column 4, lines 36-39 and figure 4), which reads on a processing unit for scaling up or down the sizes of the document images based on the calculated scaling factor. He also teaches on a printer (20) that analyzes print data and prints the image (column 2, lines 66-67), which reads on a forming unit for forming images based on the image data on the selected paper.

3. The main control section (61) of Moro could have been modified with the print driver, print data generator (E5) and the printer (20) of Miyake. This modification would have been obvious to one of ordinary skill in the art at the time of the invention to assure that the size of the image is the same as the output paper so that the entire image will fit into the area of the output paper to be printed.

26. Regarding claim 11, As best understood, Moro teaches that the main control section (61) receives document images of different sizes (column 9, lines 35-40), this reads on receiving an individual print job containing image data based on multiple document images of various sizes and/or orientations.

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27. Moro fails to teach of detecting a maximum size of document images based on the received image data, calculating a scaling factor that causes the detected maximum size to match with the size of a print area and scaling up or down the sizes of the document images based on the calculated scaling factor.

28. Miyake teaches of a layout calculating unit (E3) that calculates layout quantity per page (column 4, lines 14-20), which reads on detecting a maximum size of document images, based on the received image data. He also teaches that the print driver (PD) applies a pattern in which, enlargement or reduction corresponds to the relationship between image size and sheet size such that printing takes place on the entire sheet (column 3, lines 21-28), which reads on calculating a scaling factor that causes the detected maximum size to match with the size of a print area. Miyake teaches of a print data generator (E5) that changes original image magnifications to correspond to sheet size (column 4, lines 36-39 and figure 4), which reads on scaling up or down the sizes of the document images based on the calculated scaling factor.

4. The main control section (61) of Moro could have been modified with the layout calculating unit (E3), print driver and the printer data generator (E5) of Miyake. This modification would have been obvious to one of ordinary skill in the art at the time of the invention to assure that the size of the image is the same as the output paper so that the entire image will fit into the area of the output paper to be printed.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to Michael Burleson whose telephone number is (571) 272-7460 and fax number is (571) 273-7460. The examiner can normally be reached Monday thru Friday from 8:00 a.m. – 4:30p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at (571) 272-7471

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Michael Burleson
Patent Examiner
Art Unit 2626

MB

Mlb
July 20, 2005

KAW Williams
KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER